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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,320	02/24/2000	WOLFGANG JANTZEN	LI-71472	2152

7590 03/26/2003

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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/446,320

Applicant(s)

JANTZEN, WOLFGANG

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 10 is/are rejected.
- 7) ☒ Claim(s) 3,4,7-9 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sexton (US 4,630,265).

Regarding claim 1, Sexton teaches an apparatus and method for a redundant serial bus having $n > 1$ parallel bus lines for redundant networking of bus subscribers (fig. 1 bus A, B).

The redundancy means can be connected upstream having n interfaces (fig. 1 box 16, 18, 20) for connection to n parallel bus lines and an interface for connection to a communications interface (fig. 1 box 10, 12, 14) of at least one bus subscriber.

The redundancy means can be connected upstream having at the receiving end, an input stage (fig. 2 element 30, 32) at least for each bus line and has an evaluation stage (fig. 2: output of box 48) and output stage (fig. 2: output of box 48).

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The evaluation stage has a means for evaluating the validity of the data stream and for selection of one of the bus lines (fig. 4, col. 4 lines 32-47).

The redundancy means can be connected upstream, at the transmitting end, to a driver (fig. 1: see communication between boxes 16 and 10).

Although Sexton fails to teach a single bus communications interface, the inventor teaches only one output is selected (fig. 2: see outputs box 48).

It would have been obvious to one of ordinary skill in the art to input the two outputs (fig. 2 box 48) into an OR gate. This would improve the system since the communications devices would not have to determine which signal the MAU of fig. 1 selected.

Regarding claim 2, the input stage has a means for synchronization (fig. 5 box 62, 66) and filtering (fig. 5 box 60, 64, 42, 46, 48).

Regarding claim 5, the evaluation stage has a means for evaluation of the data stream, for time evaluation, for assessment of the state of the receiving lines and for line selection (fig. 4).

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Regarding claim 6, the redundancy means can be connected upstream can be permanently set to one bus line (fig. 4: No Change, col. 3 lines 16-22). Note, given a failure in one bus line, the other line will always be selected.

Regarding claim 10, during operation, identical message packets are sent in parallel and at the same time to all bus lines and the packets are received in parallel (fig. 1 buses A,B, col. 2 lines 14-19), the data streams are checked for validity and depending upon the validity, one of the bus lines is selected (fig. 4, col. 4 lines 32-47).

Allowable Subject Matter

3. Claims 3, 4, 7-9, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter.

Regarding claim 3, nothing in the prior art of the record teaches or fairly suggests serial/parallel conversion, in combination with the other limitations listed in the claim.

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Regarding claim 7, nothing in the prior art of the record teaches or fairly suggests the redundancy means can be connected upstream can be permanently set to one bus line, in combination with the other limitations listed in the claim.

Regarding claim 9, nothing in the prior art of the record teaches or fairly suggests a diagnosis interface for connection of control lines, in combination with the other limitations listed in the claim.

Regarding claim 11, nothing in the prior art of the record teaches or fairly suggests data packets are sent and received on the same bus line in order to diagnose the redundant serial bus, in combination with the other limitations listed in the claim.

Prior art is of record

5. The prior art is of record but not relied upon in the office action. Creedon (US 5,185,537) teaches flip flops perform filtering (fig. 1, col. 3 lines 1-2).

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald


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Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2666



March 13, 2003


DANGTON
PRIMARY EXAMINER